

WHAT IS CLAIMED IS

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1. A cleaning apparatus comprising:

a blade chip having a rubber plate member and  
a reinforcing plate member that are joined together;

a supporting plate supporting the blade chip;

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a holder pressing the blade chip against the  
supporting plate.

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2. The cleaning apparatus as claimed in claim  
1, wherein the length between a distal end of the rubber  
plate member and a distal end of the reinforcing plate

20 member is no more than the thickness of the rubber plate  
member.

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3. The cleaning apparatus as claimed in claim 1, wherein at least a portion of the rubber plate member is surface treated for reducing friction created thereon.

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4. The cleaning apparatus as claimed in claim 1, further comprising a holding plate having a support axle for rotatably supporting the blade chip via the supporting plate.

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5. An image forming apparatus comprising:  
the cleaning apparatus as claimed in claim 1.

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6. A process cartridge having an image carrier on which an electrostatic latent image is formed, a charging unit for charging the image carrier to form the electrostatic latent image thereon, a developing

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unit for developing the electrostatic latent image with  
a developer, the process cartridge comprising:

the cleaning apparatus as claimed in claim 1.

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7. An image forming apparatus comprising:  
at least one process cartridge as claimed in

10 claim 6.

15 8. A cleaning apparatus comprising:  
a blade chip having a rubber plate member and  
a reinforcing plate member that are joined together;  
a vibration plate supporting the blade chip;  
a piezoelectric element disposed on the  
20 vibration plate for propagating vibration to the blade  
chip via the vibration plate; and  
a holder pressing the blade chip against the  
vibration plate.

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9. The cleaning apparatus as claimed in claim  
8, wherein at least a portion of the rubber plate member  
5 is surface treated for reducing friction created thereon.

10 10. The cleaning apparatus as claimed in  
claim 8, further comprising a holding plate having a  
support axle for rotatably supporting the blade chip via  
the vibration plate.

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11. The cleaning apparatus as claimed in  
claim 8, wherein the vibration plate is set with a plate  
20 thickness which is less than that of the rubber plate  
member and that of the reinforcing plate member.

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12. The cleaning apparatus as claimed in  
claim 8, wherein one or more notches are formed in a  
portion of the vibration plate other than a portion of  
the vibration plate on which the piezoelectric element  
5 is disposed.

10 13. The cleaning apparatus as claimed in  
claim 8, wherein the rubber plate member and the  
reinforcing plate member are joined together via an  
intermediary member disposed therebetween.

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14. An image forming apparatus comprising:  
the cleaning apparatus as claimed in claim 8.

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15. A process cartridge having an image  
25 carrier on which an electrostatic latent image is formed,

a charging unit for charging the image carrier to form the electrostatic latent image thereon, a developing unit for developing the electrostatic latent image with a developer, the process cartridge comprising:

5                   the cleaning apparatus as claimed in claim 8.

10                   16. An image forming apparatus comprising:  
                    at least one process cartridge as claimed in  
claim 15.